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COTTON LITERATURE

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COMPILED BY EMILY L. DAY, LIBRARY SPECIALIST IN COTTON MARKETING,
BUREAU OF AGRICULTURAL ECONOMICS, WASHINGTON, D. C.

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COTTON LITERATURE is compiled mainly from material received in the Library of the U. S. Department of Agriculture.

Copies of the publications listed herein can not be supplied by the Department except in the case of publications expressly designated as issued by the U. S. Department of Agriculture. Books, pamphlets, and periodicals mentioned may ordinarily be obtained from their respective publishers or from the Secretary of the issuing organization. Many of them are available for consultation in public or other libraries.

PRODUCTIONGeneral

Arizona agricultural experiment station. Forty-third annual report for the year ended June 30, 1932. 133p. illus. Tucson [1932]

Reports on the following cotton projects: Cotton production and soil and climatic environment (No. 113 P): p.72-73.-Culture and development of Pima and Upland cotton (No.62 S): p.75.-Cooperative field experiments (No.17 S): p.76.-Cotton breeding (No.47 A): p.106-108.- Texas root rot of cotton (No.42 A): p.110-111.

India. Madras Presidency.Dept. of agriculture. Reports of the subordinate officers for 1931-32. 144p. Madras, Printed by the Supt.govt.press, 1932.

Administration report of the entomologist for 1931-32, by T.V.R.Ayyar: p.115-122. Cotton leaf hopper (*Empoasca devastans*, D.): p.119

Report of cotton specialist, by V. Ramanathan: p.99-103.

Sudan.Dept. of agriculture and forests. Annual report... for the year ended 31st December, 1931. 164p. illus. Mimeographed. [Khartoum] 1932.

Cotton yields: p.8-11, 13-18, 23-28, 94-98, 107-108; pests: p.91-92, 104-105; rotation and other cultural experiments: p.109-129.

Abstract in Empire Cotton Growing Rev. 9(4):311. Oct.1932.

Botany

Afzal,Mohammad, and Singh,Sarup. A note on a floral abnormality in cotton. Agr.& Live-stock in India 2: 632-636. illus. Nov. 1932. (Published by Government of India Central Publication Branch, Calcutta. India)

References: p.636.

Avtonomov,A.I. Kvoposy izycheniia egipatskogo khlopchatnika. Tashkent.Nauchno-Issledovatel'skii Institut po Khlopkovodstvu.All-Union Sci.Research Inst. Cotton Culture and Indus.Proc.9/3, 28p. illus. 1930.

Investigation in Egyptian cottons.

"The Sea Island examined proved to be very heterogeneous in time of maturity and lint quality, certain individuals being as late as Sakelaridis, which also contained a certain number of early

50 plants. These latter, however, were on the whole also inferior in lint qualities. A series of experiment was designed to study the possibility of obtaining early Egyptian types and a comparison of Ashmouni and Upland types. Certain of the selected Upland types combined increased earliness with lint length equal or superior to the original stock. One line from the sort Janovich was 7-8 days earlier, with a lint length of 35.4 mm.; another from Ashmouni was three days earlier, with lint 3 mm. longer than the original, giving yields 70-80% of that of the standard sort Triumph Navrotskii. "-Jour. Textile Inst. 24(1): A9-A10. Jan. 1933.

Hutchinson, J.B. The inheritance of anthocyanin pigmentation in Asiatic cottons. Jour. Genetics 26(3): 317-339. illus. Dec. 1932. (Published in London, England)

Reprinted in Empire Cotton Growing Crop. (Gt. Brit.) Cotton Research Sta., Trinidad, Memoirs (series A, Genetics) No. 4.

Konstantinov, N. Vliianie prodolzhitel'nosti perioda osveshcheniia na razvitie khlopchatnika (fotoperiozm) Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 10, 18p. illus. 1930.

The influence of period of illumination on the development of cotton.

"Experiments were carried out on perennial forms of Gossypium peruvianum and Gossypium herbaceum, the effect of varying length of day being observed. The greatest acceleration of flowering was observed in the plants with ten hour illumination. Various botanical forms, and sorts varying in earliness, were subjected to this period of illumination. It was found that the reduced length of day had the most effect on the latest ripening sorts and less and less on the earlier ones. The very earliest reacted hardly at all to reduced light. The results of reducing the length of day are described in detail. The effects were produced by merely darkening the plant, complete darkness was not essential. The importance of these results to the breeder in making hybridisation is pointed out and it is suggested that it will be possible to cross forms widely differing in time of maturity. A cross which may be of advantage for example is that between the perennial Peruvian types, with extreme boll size, with the Egyptian cottons. The F1 progeny of such a cross is actually under observation." - Jour. Textile Inst. 24 (1): A10. Jan. 1933.

Makarov, A.F., and Gel'fand, N.A. Vliianie polivov na razvitie i urozhai khlopchatnika. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus.

Proc.10/30, 83p. illus. 1931.

Influence of watering on development and yield of cotton.

O'Kelly, J.F., and Hull, W.W. Parent-progeny correlations in cotton. Jour.Amer.Soc.Agron.25: 113-119. Feb.1933. (Published at Geneva, N.Y.)

Literature cited: p.118-119.

Sen, K.R. On the variation of certain characters of cotton in relation to the position of seeds in a lock. Indian Jour.Agr.Soc.2: 484-498. Oct. 1932. (Published at Calcutta, India)

With a statistical note by S.S.Iyer.

References: p.498.

Terada, Shin'ichi, and Iwasaki, Motoji. On the relation between watering and growth of cotton plant. Jour.Soc.Trop.Agr.Japan 4: 256-264. Oct.1932. (Published at Taiwan (Formosa), Japan)

In Japanese.

Agronomy

Allanmyo agricultural station and sub-stations. Report...for the year ended 31st March 1932. 22p. tables. Rangoon. 1932.

Cotton variety experiments: p.5-7.

American cyanamid company, New York. The Cyanamid plan for growing cotton and corn. 14p. illus. [1932]

Brand, C.J. Producing low cost cotton. Even at present extremely low prices of cotton, the proper use of commercial fertilizer will give a substantial return on the investment...about \$2 or \$1 on the average. Cotton Econ.1(5): 2. Feb.2, 1933. (Published at Balter Bldg., New Orleans, La.)

Cotton. Bul.Imp.Inst. [London] 30(3): 344-346. Oct. 1932. (Published by John Murray, Albemarle St., W., London, England)

Investigations in Nigeria. "Report from the Botanical Section, Southern Provinces, covers the investigations carried out by Mr.E.H.G.Smith during the first half-year 1932." Yield of Ishan cotton; rotation of nucuna and cotton. Selection work in the Northern Provinces.

Abstract in Empire Cotton Growing Rev.10(1): 46-47. Jan.1933.

Frangopoulos, A.M., and Lett, B. Cotton experiments, 1932. Cyprus Agr.Jour.27(4): 133-137. Dec.1932. (Published at Nicosia, Cyprus)

The experiments consisted of date of sowing trials, comparative trials with chemical fertilizers of certain types commonly used in Cyprus, spacing tests, and trials with imported varieties (from Egypt, Iraq, and South Africa).

Georgiev, Velin. Sravnitelni sortovi opiti s pamutsi 1926-1930 g. Sadovo, Bulgaria. Durzhavna Raionna Zemledelska Opitna i Kontrolna Stantsiia. Nauchni Trudove 21, 38p. illus. 1930.

In Bulgarian with English summary.

Comparative experiments with varieties of cotton 1926-1930.

Ioffe, R. I. A. Zelenye udobreniia pod khlopchatnika. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 11/3, 19p. tables. 1930.

Green manures for cotton.

Low cost cotton produced with fertilizer. Amer. Fert. 78(3): 11. Feb. 11, 1933. (Published at Philadelphia, Pa.)

Mahlaing agricultural station. Report...for the year ended 31st March 1932. 25p. illus., tables. Rangoon, 1932.

Cotton variety tests: p. 3-4.

Manurial tests on cotton: p. 12-15.

Mandrygin, V. N. Vliianie mineral'nykh azotistyykh udobrenii na khlopchatnika. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 14/9, 41p. illus. 1930.

The influence of mineral nitrogen fertilization upon the cotton plant.

Nagibin, I. A. D. Nekotorye osobennosti kul'tury khlopchatnika v razlichnykh raionakh Srednei Azii. 15p. Moskva and Tashkent, Nauchno-Issledovatel'skii institut po khlopkovodstvu, khlopkovi promyshlennosti i irrigatsii (NIKHI), 1931

Certain peculiarities of cotton culture in different districts of Central Asia.

Petrov, E. Plodorodie pochvu i znachenie glubokoi vspashki i oborota plasta. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 49, 12p. illus. 1931.

Soil fertility and the importance of deep ploughing and cultivating.

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Die resultate der mit verschiedenen kulturpflanzen ausgeführten versuche während der letzten jahre und im jahre 1930. Sadovo, Bulgaria. Dürzhavna Raionna Zemledelska Opitna i Kontrolna Stantsiia. Jahresbericht 1930. 159p. Sofiya. 1932.

The results of diversified cultivation experiments during the last year and the year 1930.

Cotton experiments: p.158.

Reynolds, E.B., and others. Fertilizer experiments with cotton. Tex. Agr. Expt. Sta. Bul. 469, 31 p. tables. College Station. 1932.

Results of seven years' experiments in various sections of Texas.

Single strain of better cotton sought in India by 'breeding.' Cotton Trade Jour. 13(8): 4. Feb. 25, 1933. (Published at New Orleans, La.)

Report on the Madras Herbaceum Scheme which is financed by the Indian Central Cotton Committee.

Zhorikov, E.A. Dinamika pitatel'nykh soedinenii v pochve polei razlichnogo kul'turnogo sostoianiia.

Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 15, 53p. illus. 1930.

The dynamic of nutritive compounds of the soils of different stages of cultivation.

A cotton field was one of the fields studied.

Diseases

Christie, J.R., and Arndt, C.H. Further notes on the nematodes associated with the soreshin of cotton. U.S. Dept. Agr. Plant Dis. Rep. 17: 10-12. Mimeographed. Jan. 15, 1933. (Published at Washington, D.C.)

Report of the fifth annual cotton-root-rot conference. Phytopathology 22(12): 983-993. Dec. 1932. (Published at Lancaster, Pa.)

"Prepared for the conference by the following committee: W.M. Ezekiel, Chairman, D.C. Neal, Paul R. Dawson, and E. B. Reynolds."

The conference was held at the University of Texas, Austin, on Feb. 1 and 2, 1932.

Summaries are given of 55 technical reports of experimental work.

Stoughton, R.H. The influence of environmental conditions on the development of the angular leaf-spot disease of cotton. IV. The influence of atmospheric humidity on infection. Ann. Appl. Biol. 19(3): 370-377. illus. Aug. 1932. (Published by Cambridge University Press, Fetter Lane, London, E.C. 4, England)

"The seed used throughout the experiments has been Sakellarides variety from the Gezira Plain."

"High humidities favour the development of the disease."-Summary.

Abstract in Jour.Textil Inst.23(11): A587.Nov. 1932.

Uppal, B.N. Occurrence of Sclerotium Rolfsii on cotton in Bombay. Jour.Textile Inst.24(1): A6. Jan.1933. (Published at 16, St. Mary's Parsonage, Manchester, England)

Abstract from Internatl.Bul.Plant Protection 6(3): 38. 1932.

"Sclerotium rolfsii has been reported for the first time to be causing injury to cotton under field conditions in the Bombay Presidency."

Insects

Bouvier. Recherches sur l'action de la chloropicrine sur le ver rose du cotonnier, la graine de coton, le charançon du blé et la graine de blé. Comptes Rendus des Séances de l'Académie d'Agriculture de France 19(2): 76-79. Jan.11, 1933. (Published at Paris, France)

Research on the action of chloropicrine on pink bollworm of cotton, the cotton seed, the weevil of wheat and the wheat grain.

Caldwell, A.H. Bugs that injure cotton bolls. Ariz. Prod.11(22): 2.Feb.1, 1933. (Published at Phoenix, Ariz.)

Chiaromonte, A. Comparisons entomologiques pour la culture du cotonnier entre la Colonie de l'Érythrée et la Somalie Italienne. Coton et Culture Cotonniere 7(2): 83-90. Aug.1932. (Published at 34, Rue Hamelin, Paris, France.)

An entomological comparison of cotton culture in Eritrea and Italian Somaliland.

Abstract in Rev.Appl.Ent.(ser.A)20(7): 394. 1932.

Gaines, J.C. Reliability of differences between data obtained in cotton insect investigations. Jour. Econ.Ent.26(1): 274-279. Feb.1933. (Published at Geneva, N.Y.)

Popov, P.W. The outbreaks of "Epitetranychus Althaeae V. Hans" in Central Asia in connection with the meteorological conditions. Tashkent.Nauchno-Issledovatel'skii Institut po Khlopkovodstvu.All-Union Scientific Research Institute of Cotton Culture and Industry Proc.51:3-23. 1931. (Published at Moskva and Tashkent, U.S.S.R.)

In Russian. Summary in English.

Farm Engineering

Dickson, R.E. Terraces to conserve surface runoff. Agr.Engin.14(2): 50. illus. Feb.1933. (Published at Mount Clemens, Mich.)

Paper presented at meeting of Land Reclamation Division of the American Society of Agricultural Engineers at Chicago, Ill., Dec.1931.

The author reviews experiments of the Texas Agricultural Experiment Station on factors involved in water conservation for cotton areas. "Terraces have been in use for five years and there has not been a break nor has there been a cotton plant damaged by excessive moisture."

Drobyshevskii, I.U. O polivakh egipetskogo khlopchatnika (iz rabot Otdela melioratsii Iolotanskoi opyt. stantsii) 11p. Tashkent, Nauchno-issledovatel'skii institut po khlopkovodstvu, khlopkovoi promyshlennosti i irrigatsii (NIKHI), 1931.

Irrigating Egyptian cotton (from the work of the Iolotansk improvement station).

Shleikher, A.I. Rezul'taty opytno-pokazatel'nykh uchastkov za 1927-1930 gg. 28p. Moskva and Tashkent [Nauchno-issledovatel'skii institut po khlopkovodstvu, khlopkovoi promyshlennosti i irrigatsii (NIKHI) 1931.

Results of the experimental-exhibition plots, 1927-1930.

Effects of machine cultivation on cotton: p.5-18.

Farm Management

India. Punjab. Board of economic inquiry. Farm accounts in the Punjab, 1930-1931. Being the seventh year's accounts of certain farms, with a section on the cost of well-irrigation in the Punjab, by Kartar Singh. 249p. tables. [Lahore] 1932. (Rural section pub. 26)

Statistics are given for cotton, among other crops.

Farm Social Problems

Dickson, H. Cotton blossoms out. Country Home 56(12): 10-11, 31-32, 33-34. illus. Dec.1932. (Published by Crowell Publishing Co., Springfield, Ohio)

Describes the life of more than 700 tenants, mostly negroes, on the Panther Barn Plantation [Mississippi?] "where nine thousand open acres are being cultivated with the promptitude and accuracy of a banking corporation."

Manny, T.B. Farmer opinions and other factors influencing cotton production and acreage adjustments in

the south. U.S.Dept.Agr.Circ.258, 42p. tables. Washington,D.C., 1933.

In the course of this study "834 farmers in 11 counties were interviewed...These counties were selected as representative of three cotton-growing areas east of the Mississippi River: The Mississippi Delta, the piedmont, and the South Atlantic coastal plain."

Tables show acreage statistics, 1926-1931.

Cooperation in Production.

Blackwell,J.O. One grade, one staple.Acreage pledged to one variety of cotton in Gonzales county will be quadrupled in the second year of its standardization. Acco Press 11(2): 4-6. illus. Feb.1933. (Published by Anderson,Clayton and Co.,Houston,Tex.)

One-variety project in the School Land community in Gonzales county,Texas, selected "as one of three blocks in the United States to be worked in cooperation with the Federal Experiment Station at Greenville, and the Bureau of Plant Industry."

Extract in Cotton Econ.1(7): 2,4. Feb.16,1933.

Westbrook,E.C. Cotton for Georgia,1932. Ga.Agr.Col. Ext.Circ.211,4p. Athens.1933.

Describes the general situation and that in one-variety communities.

PREPARATION

Ginning

Adams, Orville. The ginners' overhead. Discussion of fixed charges in relation to cost. Cotton and Cotton Oil News 33(5):3-4.Feb. 4, 1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Adams, Orville, Lower power costs for ginners necessary. Cotton and Cotton Oil News 34(8): 5. Feb.25, 1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Adams, Orville. The menace of dust in gins.Dust is a fire hazard and menace to health. Cotton and Cotton Oil News 34(6): 3-4. illus. Feb.11,1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Describes new methods for control of dust and lint.

Cotton ginning machines. Patent single action roller gin. Textile Recorder 50(598):45. illus.Jan.15, 1933. (Published at 121 Deansgate, Manchester,England)

Describes improvements recently made on Platt Bros.' single action Macarthy roller gin.

MARKETING

General

Cotton trade statistical bureau, Manchester. Handbook of cotton trade statistics, 1924-1931. 75p. Manchester, 1932.

"Intended to supplement the information given in the monthly and quarterly bulletins issued to subscribers."

Egyptian cotton year book for 1931-1932. Ed. by George Pilavachi. 206p. illus., tables. [Alexandria, Société de publications égyptiennes, 1932?]

Partial contents.-Review of the 1931/1932 cotton season and prospects for 1932/1933: p.11-29.-The Alexandria general produce association: p.43-50.-The Alexandria testing house: p.57-65.-The Egyptian government's policy on cotton: p.67-72.-Research work at Giza on new varieties of cotton, by C.H. Brown: p.78-83.-The 7-cents import duty on longstaple cotton entering U.S.A. and its effect in the Egyptian and American longstaple cotton trade: p.91-100.-Cotton marketing and trade in the interior of Egypt: p.127-139.-Statistical tables of the production, movement and distribution of Egyptian cotton: p.151-199.

Contains also changes in rules of various exchanges.

Georgia agricultural outlook for 1933. Ga. Agr. Col. Ext. Div., Econ. Facts for Ga. Farmers (1): 1-16. Athens. 1932.

Cotton: p.5-7.

Indian cotton facts [13th] 1932. Cotton crops, acreage, receipts, exports, prices, etc., cotton & piece goods, and Indian mill industry, etc. Compiled by Toyo Menka Kaisha, Ltd. 224p. tables. Bombay [1932]

James, G.R. Pay debts with commodities. A suggestion for relieving agriculture, especially cotton growers, by the acceptance of payment in kind for obligations, debts and taxes, from the producers. Natl. Sphere 11(1): 13-14. Jan. 1933. (Published at Munsey Bldg., Washington, D.C.)

The plan is stated as follows: "1. That State and Federal Governments, their agencies and subdivisions, individual and corporate creditors accept at a designated price nonperishable products in payment on designated obligations. 2. That such products be accepted from landowners and lessors and all debtors engaged in the actual production of such commodities. 3. That the basis of grades and prices be

fixed by the Department of Agriculture for the purpose of tender."

Jordan, Harvie. Farming outlook for current year. South. Cult. 91(1): 2. Jan. 1, 1933. (Published by the Constitution Publishing Co., Box 1731, Atlanta, Ga.)

Table shows average prices of spot cotton by decades, 1855-1930.

Recommends acreage reduction as solution to the problems of southern cotton growers.

Neel, L.R. How to go about farming with cotton in 1933. South. Agr. 63(2):5. Feb. 1933. (Published at Nashville, Tenn.)

Outlook for 1933.

Roberts, C. Will farmers grow cotton at a loss? Okla. Farmer-Stockman 46(3): 35-49. Feb. 1, 1933. (Published at Oklahoma City, Okla.)

Outlook for 1933?

Shannon, I.V. Cotton; a first-of-the-year view of the surplus, consumption, prices. Amer. Bankers Assoc. Jour. 25(7): 30-56. Jan. 1933. (Published at 22 E. 40th St., New York, N.Y.)

"There is no prospect of a material advance in prices until consumption begins to make substantial inroads into this huge surplus or until there is a radical change in business and financial conditions throughout the world. The future of cotton prices is probably more closely linked with the course of the British pound sterling and restoration of Europe's buying power than with any other factors. Settlement of the European war debt controversy on a basis enabling European spinners to buy our cheap cotton would go a long way toward overcoming the problem of our surplus."

Todd, J.A. Empire cotton growing. Production and consumption. Trop. Agr. [Trinidad] 10(2): 43-47 tables. Feb. 1933. (Published at the Imperial College of Tropical Agriculture, St. Augustine, Trinidad, W.I.)

U.S. Dept. of agriculture. Bureau of agricultural economics. The agricultural outlook for 1933. Prepared by the staff of the Bureau of agricultural economics assisted by representatives of the agricultural colleges and extension services and the Federal farm board. U.S. Dept. Agr. Misc. Pub. 156, 99p. Washington, D.C., 1933.

Cotton: p. 73-78.

Vandiver, H. Marketing the 1933 cotton crop. Mid-South Cotton Assoc. News 10(8): 2. Feb. 1933. (Published at 822 Falls Bldg., Memphis, Tenn.)

"One of a series of sixteen talks made over Radio Station WTJS, in Jackson, Tenn., in the Adult Farmers' School."

Wellman, H.R. and others. The 1933 agricultural outlook for California. Calif. Agr. Col. Ext. Circ. 71, 93p. illus. Berkeley. 1933.

Contribution from the Giannini Foundation of Agricultural Economics, Paper No. 37.

Cotton: p.83-85.

Demand and Competition

Canada. Dept. of trade and commerce. Dominion bureau of statistics. Census of industry. Report on the cotton textile industry in Canada 1931. 59p. tables. Mimeographed. Ottawa. 1932.

"This industry is divided into five separate sections (1) Cotton Yarn and Cloth, (2) Cotton Thread, (3) Cotton and Wool Waste, (4) Cotton Batting and Wadding and (5), Cotton Goods, N.E.S., comprising all manufactures, the chief component of which is cotton, and which cannot properly be classified under any of the other sections."

Chinese cotton millowners association. Cotton statistics dept. Cotton production in China 1929. 64p. tables. Shanghai [1930?]

In Chinese.

Cotton operatives' wages in Germany. Textile Weekly 10(255): 554. Jan. 20, 1933. (Published at 49 Deansgate, Manchester, England)

The Cotton trade league. Vigorous propaganda by new "ginger" group. Textile Weekly 10(258): 623. Feb. 10, 1933. (Published at 49 Deansgate, Manchester, England)

"The Cotton Trade League, which was recently founded as the outcome of a public meeting in Manchester on January 13 [1933] has stated its campaign for 'fair play for Lancashire goods' by demanding prompt Government action through the medium of public meetings in industrial cotton towns."

Describes meetings held at Oldham and Blackburn.

Fong, H.D. Cotton industry and trade in China. Chinese Social and Polit. Sci. Rev. 16(3): 347-424. Oct., 1932. (Published at Peiping, China)

This article is a summary of a two-volume work on the Cotton Industry and Trade in China by H.D. Fong, published in 1932. Statistics for various phases of the industry are given in 43 tables.

Gartside, Fred. Whither Lancashire? The need for a new outlook. Textile Recorder 50(598): 41-42. Jan. 15, 1933. (Published at 121 Deansgate, Manchester, England)

"The bulk markets of the East are taking cheap Japanese goods, and the British market itself is being subjected to the gradual infiltration of substantial quantities of continental textiles, simply because our bases of wages and costings have been out of alignment with world bases."

Governments, committees and cotton. Meeting the menace of Japan. Manchester Guardian Com. (Ann. Rev. of Brit. Trade): 50-51. Jan. 28, 1933. (Published at the Guardian Bldg., Manchester, England)

Gt. Britain. Dept. of overseas trade. Economic conditions in East Africa and in Northern Rhodesia and Nyasaland (September 1930-March 1932) Report by W.H. Franklin and C. Kemp. 83p. tables. London, H.M. Stationery off., 1932.

Cotton piece goods trade: p. 26-28. Cotton exports: p. 39-40.

Appendix IV. East Africa. Imports of Cotton piece goods and artificial silk piece goods showing principal countries of origin 1929-1931: p. 66-67.

Gt. Brit. Dept. of overseas trade. Trade conditions in Southern Rhodesia, June, 1932. Report by J.W. Brigden. 40p. tables. London, H.M. Stationery off., 1932. Textiles: p. 8-9.

Great Britain. I. The position of the government. II. Coal cotton and railways. Round Table (88): 846-852. Sept. 1932. (Published by Macmillan and Co., Ltd., London, England)

In surveying the condition of British industries during 1931, the author discusses the effect of the depression on the British cotton industry and steps underway toward reconstruction.

International exchange and the Bombay textile industry. Indian Textile Jour. 43(507): 84-85. Dec. 1932. (Published at Military Sq., Fort, Bombay, India)

By "Poverty Knocker."

Influence on Bombay cotton industry of conditions in Japan, China, the United States, and Great Britain.

Joshi, C.B. India buys American. Cotton Digest 5(15): 4. Jan. 28, 1933. (Published at Houston, Tex.)

Discusses Indian consumption during 1929-1931. "On the average of the last two seasons India imported 500,000 bales of foreign cotton and of this amount American cotton represented 42 per cent."

The Lancashire cotton industry in 1932. Labour settlements the favourable feature. Textile Recorder 50 (598):24. Jan.15,1933. (Published at 121 Deansgate, Manchester,England)

Lee,Kenneth. The cotton industry and its future. Textile Recorder 50(599):24-25. Feb.15,1933. (Published at 121, Deansgate, Manchester, England)

"Abstract of a lecture given on January 26, [1933] before the students of the Imperial College of Science and Technology,London."

"A survey of Lancashire's difficulties.How Lancashire lacked foresight in 1919 in anticipating what would happen to the cotton trade. How the lack of good leaders is delaying steps towards trade recovery. The value of research."

Machin, W.F. One industry, one premier purpose. How Japan organises for bulk textile sales. Manchester Guardian Com. 26(655): 3. Jan. 7, 1933. (Published at Guardian Building, Manchester, England)

Manchester chamber of commerce. Annual reports for 1932. Manchester Chamber of Com.Monthly Record 44(1-Suppl.): 43p. illus. Jan. 31,1933. (Published at Manchester, England)

Annual report of the Board of directors: p.iii-xiv.

Annual reports of trade sections: p.xv-xliii. Tables give exports of cotton piece-goods from the United Kingdom to African colonies, China, Egypt, Turkey, Greece, India, Australia; and exports of cotton yarn to certain markets during the years 1913,1930-31-32: p.xxxiii.

Testing house section: p.xxxviii-xliii.

Manchester's trade in raw cotton. Imports increase by over 100,000 bales. Manchester Guardian Com. (Ann. Rev.Brit.Trade): 9. Jan.28,1933. (Published at the Guardian Bldg.,Manchester,England)

Marshall,C.C. Why not substitute low grade cotton for imported jute. Cotton Ginners' Jour.4(5): 9,15-16. Feb.1933. (Published at 109 North Race St.,Dallas, Tex.)

Endorses action of Texas Cotton Ginners' Association in passing resolution "requesting the Texas legislature to pass a resale tax on jute products sold" in Texas.

Niemeyer,A. The German textile industry.Prospect at the start of 1933. Textile Recorder 50(599): 30-31. Feb.15,1933. (Published at 121, Deansgate, Manchester, England)

Niemeyer, A. Recovery in the international textile industry. Textile Recorder 50(593): 28-29. Jan. 15, 1933. (Published at 121, Deansgate, Manchester, England)

Includes discussion of the cotton textile industries of France, Switzerland, United States and Japan.

Oldham master cotton spinners' association, ltd. Report of the committee for year ended December 31st, 1932 together with lists of the committee and members. Issued January 13th, 1933. 133p. Oldham, England [1933]

Surveys the situation in the British cotton industry.

Appendix: Copies of circulars issued by the Oldham Master Cotton Spinners' Association, and the Federation of Master Cotton Spinners' Associations, Ltd.

The six-loom cotton-weaving agreement. Textile Manfr. 59(679):6-8. Jan. 1933. (Published by Emmott & Co., Ltd., 31, King St., West, Manchester, England)

"The more-loom dispute has concluded in an agreement on a six-loom list, which is given below, and it is expected that many firms will adopt this system [in England]. Comments are made on the requirements in reorganisation."

Extract in Textile Mercury and Argus 87(2283):510. Dec. 16, 1932.

Sloan, G.A. The fundamentals of profitable operation. Cotton 97(2): 26-29. Feb. 1933. (Published at Atlanta, Ga.)

"I have gone to some length in describing certain problems with which cotton mills are concerned in order to show that in dealing with these problems the industry has slowly but surely been building toward profits."

Among fundamentals listed are "(1) A plentiful source of satisfactory raw material easily accessible and relatively inexpensive as compared with the price of the finished product. (2) A sufficient quota of skilled labor... (4) A consistent and increasing demand for the industry's products," etc.

Woolf, D.G. Roller-coaster year of 1932 leaves textile industry breathless but hardened. Textile World 83(3):380-383. illus. Feb. 28, 1933. (Published at 330 West 42d St., New York, N.Y.)

Cotton: p.382-383.

Supply and Movement

L'acréage cotonnier américain. Bulletin de l'Union des Agriculteurs d'Égypte 30(237): 668. Dec. 1932. (Pub-

lished at Cairo, Egypt.)

American cotton acreage.

Briggs, F.A. What kind of cotton shall we grow? The quality which the mills of the world want should be the guide. Farm and Ranch 52(5): 1,12. illus.Mar.1, 1933. (Published at Dallas, Tex.)

The author describes the work of the Division of Cotton Marketing, U.S.Bureau of Agricultural Economics, in finding out "the kind of cotton the spinners most desire" and securing "data on grade, staple, and character of cotton produced" in different areas.

Carle, Georges. La culture du coton en Afrique du Nord en septembre 1932. Association Cotonnière Coloniale Bul.31(9): 11-14. Jan.1933. (Published at 53, Rue de Chateaudun, Paris, France)

Cotton cultivation in North Africa in Sept. 1932.

Economic reasons why author favors continued cultivation of cotton in irrigated territory of French possessions in North Africa.

Christidis, B.G. La culture du coton en Grèce. Coton et Culture Cotonnière 7(2): 71-81. illus. Aug.1932. (Published at 34, Rue Hamelin, Paris, France)

Cotton cultivation in Greece.

Le coton de Turquie. Revue Textile 30(6): 591-593. June 1932. (Published at 61, Avenue Jean-Jaurès, Paris, France)

From "Association turque pour l'économie nationale".

Cotton cultivation in Turkey.

"The soil of Turkey is suitable for cotton cultivation. The Government has established stations for seed selection, and is encouraging cultivation. An American cotton, Express variety, of staple length 26-28 mm. and spinning up to 40's, and a variety of American origin known as 'secours' (iané), which has a staple length of 22-27 mm. and will spin to 24's, are grown. At present 80 per cent. of the crop is obtained from seed of the indigenous variety which is most resistant to the prevailing climatic conditions. This type of cotton cannot be spun beyond 24's; it is being replaced by other types of better quality."-Empire Cotton Growing Rev.10(1): 56. Jan.1933.

Frank, J.E. Puerto Rico Sea Island cotton. The splendid character of Puerto Rico Sea Island cotton should draw greater attention to the steadily growing importance of Puerto Rico as the only United States possession producing this variety. Cotton Econ.1 (6): 2. Feb.9,1933. (Published at Balter Bldg., New Orleans, La.)

Lists grade classifications and states plans of the government to investigate the cotton situation.

Haines, E.S. Southern agriculture--America's greatest opportunity. 37p. [Memphis? Tenn., 1932]

Read at the meeting of the Egyptians, Memphis, Dec.13, 1932.

The place of cotton in the South's future plans is discussed: p.14-23. "The importance of cottonseed meal in a program of livestock farming may become an important factor in determining the extent to which cotton will continue to be grown in the states where production costs may remain relatively higher."

International institute of agriculture. Documentation concernant les réunions du bureau de la Commission pour l'agriculture des pays tropicaux et subtropicaux du Conseil international scientifique agricole. 310 p. illus. Rome, Impr. Chambre des députés de C. Colombo, 1932.

Documents concerning the meetings of the Commission for Agriculture in Tropical and Subtropical Countries of the International Scientific Council of Agriculture.

Bibliographies are included.

Congo Belge: p.179-191. Cotton.

L., J. Cotton growing in Sind since the construction of the Sukkur dam. Internatl. Rev. Agr. 23(12): 475T-477T. Dec. 1932. (Published by International Institute of Agriculture, Rome, Italy)

Lancastrian. Soviet Russia as a cotton-grower. Aids to success: and causes of failure. Manchester Guardian Com. 26(655): 5. Jan. 7, 1933. (Published at Guardian Bldg., Manchester, England)

Spoon, W. Beoordeeling van katoen uit Ned. Oost-Indie. Berichten van de Afdeeling Handelsmuseum van het Koloniaal Instituut 73: 22p. illus. 1932. (Published at Amsterdam, Netherlands)

"Overgedrukt uit 'De Indische Mercur' van 31 Augustus 1932."

Cotton cultivation in the Dutch East Indies.

"A report on cotton cultivation by natives and by company enterprise in the Dutch East Indies. Native cultivation is carried on in Flores, and company cultivation in Flores, the South-East Islands, and Java. Samples of nine Dutch East Indian cottons have been examined by manufacturers, and of these six appeared to be below the basic market value, namely, two indigenous varieties, one of which was Caravonica, and Cambodia, Zululand, Hybrid, Watt's Long Staple Ceylon, and Watt's Long Staple Peradenya, all imported from British India. The three types which were more favourably judged, namely, a Sakel and a Zagora from Egypt, and a Sea Island from Surinam (Dutch Guiana), were all newly imported. In how far these varieties will

thrive in the long run can only be ascertained after a period of waiting."--Jour.Textile Inst.24 (1): A6. Jan.1933.

Marketing and Handling Methods and Practices

Russell, A.L. Contract markets for commodities. 61p. New York, Russell's commercial news, inc. [c1932]
General section surveys phases of contract markets, such as exchange regulations and hedging, and defines trade customs and terms: p.5-18.
Cotton: p.24-27; cottonseed oil: p.45-46; cotton seed and cottonseed meal: p.58-59.

Services and Facilities

Brady, K.R. Manchester, England. Port, enterpot, and industrial center. Fibre and Fabric 86(2503): 3-7. illus. Jan.21,1933. (Published at 465 Main St., Cambridge, Mass.)
The cotton textile industry: p.6-7.

Cotton classing...Questions and answers pertaining to the fundamental principles of classing cotton. Mid-South Cotton Assoc. News 10(8): 5. Feb.1933. (Published at 822 Falls Bldg., Memphis, Tenn.)
To be continued.

Ellinger, Barnard. Merchanting of cotton goods. The functions of the Manchester shipper. Textile Weekly 10(256): 581-583. Jan.27,1933. (Published at 49 Deansgate, Manchester, England).

Mississippi's cotton port. Cotton Econ.1(8): 3,12. Feb.23,1933. (Published at Balter Bldg., New Orleans, La.)

"With completion of a cotton compress and warehouse, Gulfport enters the ranks of major cotton ports in the United States. Favorable rail and water transportation facilities as well as good wharf conditions offer a real opportunity to draw not only attention but steadily increasing business toward Mississippi's seaport."

Nickson, A.C. The Cotton Association. A jubilee year. Manchester Guardian Com.(Ann.Rev.Brit.Trade): 71. Jan.28,1933. (Published at the Guardian Bldg., Manchester, England)

Review of the fifty years of progress of the Liverpool Cotton Association.

Spottswood, A.D. Mobile--Port and market. Cotton Digest 5(14): 9-10. illus. Jan.14,1933. (Published

at Houston, Tex.)

"Mobile[Ala.] is the only delivery point for New York Cotton Exchange contracts on the Gulf of Mexico east of New Orleans, and one of the eight delivery points in the United States."

Cooperation in Marketing

Lepold, Günther. Die landwirtschaftliche standardisierung in den Vereinigten Staaten von Amerika unter besonderer berücksichtigung des genossenschaftswesens. 144p. illus. Berlin, 1932.

Inaug.-diss. - Berlin.

"Literatur-verzeichnis": p.[99]-108.

Agricultural standardization in the United States with special reference to cooperatives.

Cotton: p.34-40.

Vandiver, H. Progress of Mid-South cotton growers assn. Mid-South Cotton Assoc. News 10(8): 5. Feb. 1933. (Published at 822 Falls Bldg., Memphis, Tenn.) Includes brief history of the association.

UTILIZATION

Fiber, Yarn and Fabric Quality

Ardashev, B.I., and Leonov, B.I. Zol'nye elementy khlopkovogo volokna razlichnoi stepeni zrelosti. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 50: 72-80. illus. 1931. (Published at Moskva and Tashkent, U.S.S.R.)

In Russian. Summary in English.

Research of ash in cotton fibers of various degrees of ripeness.

"With the ripening of cotton the ash content relatively decreases; especially is this true for the alk. earth and alkali bases. The percentage of Ca increases in the ash. The Navrozk variety is similar in compn. to that of the American varieties with the exception of higher Ca and S."—Chem. Abs. 26(22): 5988. Nov. 20, 1932.

The ballistic test for yarns. Amer. Dyestuff Reporter 21(26): 752-753. Dec. 19, 1932. (Published by Howes Publishing Co., 440 Fourth Ave., New York, N.Y.)

Abstracted from recent literature on the subject

Includes "a brief discussion of the principle and method of the ballistic yarn test."

Bredig, G., and Gerstner, Franz. Asymmetrische katalyse mit organischer faser. (Ein neues fermentmodell.)

Biochemische Zeitschrift 250(1-6): 414-429. illus. July 19, 1932. (Published by Julius Springer, Berlin, Germany)

Asymmetric catalysis with organic fibers. A new enzyme model.

"Cotton may be converted into an active catalyst by the introduction of a diethylamino group... This fibre catalyst may be compared with an enzyme which, according to modern ideas, may be regarded as a colloidal support carrying a specific active group."- Jour. Textile Inst. 23(12): A693. Dec. 1932.

Chase, H.M. The detection of heavy metals and traces of impurities in cotton fabrics. Amer. Dyestuff Reporter 22(3): 49-81. Jan. 30, 1933. (Published at 440 Fourth Ave., New York, N.Y.)

Presented at annual meeting of American Association of Textile Chemists and Colorists, Dec. 3, 1932.

The methods of chemical microscopy and spot analysis are described.

Dorée, Charles. The methods of cellulose chemistry, including methods for the investigation of the compound celluloses. 499p. illus. New York, D. Van Nostrand co., 1933.

"Some books on cellulose and wood": p. 483-484.

"The purpose of the author has been to give full working details of a selection of the best methods required in each section of the subject, and to illustrate the use and application of the methods by full abstracts of original investigations in which they have been employed... The technique associated with the X-ray investigation of cellulose... has been designedly omitted."--Preface.

Grace, N.H., and Maass, O. The sorption of vapors on wood and cellulose. Jour. Phys. Chem. 36(12): 3046-3063. illus. Dec. 1932. (Published at Baker Laboratory of Chemistry, Ithaca, N.Y.)

"The results of water vapor sorption on various species of woods are given and compared with the sorption on cotton cellulose."

Gt. Brit. Dept. of scientific and industrial research. Fabrics research committee. The viscosity of cellulose solutions. 46p. illus., tables. London, H.M. Stationery off., 1932.

"References": p. 46.

R.H. Pickard, Chairman.

Report of a "Sub-committee appointed to consider the question of the adoption for industrial purposes of a uniform method of determining the Viscosity of Solutions of Cellulose and of expressing the results."

"Cellulose viscosity measurement decides between

mechanical and chemical damage, and is a means of process control and material specifications."

Reviewed in Jour.Textile Inst.23(12): P295-P296. Dec.1932.

Extracts in Textile Mercury and Argus 87(2280): xi. Nov.25,1932.

Heim de Balsac, and Roehrich. Etude technologique de cotons du Congo Belge. Coton et Culture Cotonniere 7(2): 99-107. Aug.1932. (Published at 34 Rue Hame-lin, Paris, France)

Technological study of cottons of the Belgian Con-go.

India.Indian central cotton committee.Technological laboratory. Tech.Circs.82-85. Dec.1932-Jan.1933. (Published at Bombay,India)

No.82.Technological report on Punjab-American 289F. 1932-33.-No.83.Technological report on Verum 262 (Akola).-No.84.Spinning test report (No.338) on samples of Bengals and Ujjain cottons, 1932-33.-No. 85.Spinning test report (No.339) on samples of Khan-desh and Moglai cottons, 1932-33.

Ivanova,V.T., and Kurennova,A.M. Izuchenie khimiche-skogo sostava khlopkovogo volokna razlichnoi stepeni zrelosti. Tashkent.Nauchno-Issledovatel'skii Instit-ut po Khlopkovodstvu.All-Union Sci. Research Inst. Cotton Culture and Indus. Proc.50: 57-71. 1931. (Published at Moskva and Tashkent,U.S.S.R.)

In Russian. Summary in English.

The chemical composition of cotton fibers at vari-ous stages of maturity.

"Cellulose accumulates rapidly up to 40 days of the age of the fiber. At 45 days 83% of the fiber is cellulose, which is almost equal to the amount of cellulose in the mature cotton. The total and protein N decrease with age and at 25 days the total N is 6 times and the protein N is 6.5 times as much as in the mature cotton. The N continues to decrease up to the 50th day. Of the N 65-75% is org., the rest is nitrate and nitrite. The amount of P_2O_5 decreases with maturity. The oentosan content decreases with age and after 40 days it remains const. It is con-cluded that cotton at 50 days is just as good for industrial purposes as mature cotton."-Chem.Abs.26 (22): 5988. Nov.20,1932.

Abstract in Jour.Textile Inst.24(1): A58.Jan.1933.

Kiangsu Province (China) Cotton experiment station. Re-port of the breaking strength and spinning test of the Chicken-foot cotton. Kiangsu Cotton Expt.Sta. Rpt. Results 1: 28p. 1930.

In Chinese.

Korzheniovskii, G.A., and Plyshkin, E.Z. Khimiko- tekhnologicheskoe ispytanie khlopkovogo volokna razlich noistepeni zrelosti. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 50: 81-100. illus. 1931. (Published at Moskva and Tashkent, U.S.S.R.)

In Russian. Summary in English.

Chemical-technological tests of cotton fiber at various stages of maturity.

"Boiling in 1% alkali removes the non-cellulose substances from cotton and at various stages of maturity these vary. Immature cotton gives up 98% and mature cotton 81% of its N upon boiling with NaOH. More NaOH is consumed by unripe cotton than by ripe. Young fiber absorbs more moisture than fiber from mature open bolls. Dyes are taken up by young cotton fibers as well as by old, especially if the cotton is mercerized."-Chem. Abs. 26(22): 5988. Nov. 1932.

Marchenko, N.I. Obsledovanie tekhnologicheskikh svoistv khlopkovogo volokna v zavisimosti ot ego zrelosti. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 50: 44-56. illus. 1931. (Published at Moskva and Tashkent, U.S.S.R.)

In Russian. Summary in English.

Study of technological properties of the cotton depending on the degree of its ripeness.

Matthew, J.A. "Measurement of fibre and yarn diameters by diffraction method." Jour. Textile Inst. 24(1): T54-T56. illus. Jan. 1933. (Published at 16, St. Mary's Parsonage, Manchester, England)

Modifications of methods previously discussed in author's paper with above title.

Methods for yarn testing. Textile Weekly 10(258): 633. Feb. 10, 1933. (Published at 49 Deansgate, Manchester, England)

"For the textile student" series.

Meyer, Hans. Neue wege der fasermessung. Melliand Textilberichte 12(11): 683-686. illus. Nov. 1931. (Published at Heidelberg, Germany)

To be continued.

A new method for measuring fibers.

Abstract in Chem. Abs. 26(12): 3381. June 20, 1932.

Mildew in cotton goods. Amer. Wool and Cotton Reporter 47(6): 16-18. Feb. 9, 1933. (Published at 530 Atlantic Ave., Boston, Mass.)

"Gray cloth free from foreign matter will seldom mildew. Causes and effects of mildew in finished

goods. Removal of doubtful advantage. Checking yarn specifications."

Mitteilungen des textilnorm, fachausschuss der textilwirtschaft. Normblattentwurf. Melliand Textilberichte 13(11): 623-626. Nov.1932. (Published at Heidelberg, Germany)

Textiles: testing standards.

"A summary is given of standardised German methods of testing textiles. The details include instructions for measuring length and thickness of fibers, length and twist of yarns, dimensions of fabrics, and tensile strengths. Standard conditions are 60-65% R.H., and a temperature of 18-25° C. (64-77° F.)"-Jour.Textile Inst. 24(1): A57. Jan.1933.

Neale, S.M., and Stringfellow, W.A. The absorption of barium hydroxide, sodium hydroxide and water by cellulose, from aqueous barium hydroxide and from mixed solutions. (Jour.Textile Inst.24(1): T30-T34. illus. Jan.1933. (Published at 16, St.Mary's Parsonage, Manchester, England)

"The regenerated cellulose sheet known as 'Cellophane' was used as the experimental material."

Pressley, E.H. A new type of cotton sorter. Jour.Amer. Soc. Agron.25(2): 88-98. illus. Feb.1933. (Published at Geneva, N.Y.)

Contribution from the Department of Plant Breeding, University of Arizona. Tucson.

A sorter, constructed by the writer, "upon which combed samples of unginned cotton may be sorted," is illustrated and its use described.

Richardson, R., and Maass, O. The sorption of sodium hydroxide on cellulose and wood. Jour.Phys. Chem. 36(12): 3064-3073. illus. Dec.1932. (Published at Baker Laboratory of Chemistry, Ithaca, N.Y.)

Cotton sorption diagrams: p.3068-3069.

Rytikov, M.G. Metodika sbora obrazuov i kharakteristika materiala dlia rabot Tsentral'noi khimiko-tekhnologicheskoi laboratorii i Tsentral'noi tekhnologicheskoi laboratorii NIKhI. Tashkent.Nauchno-Issledovatel'skii Institut po Khlopkovodstvu.All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 50: 7-14. illus. 1931. (Published at Moskva and Tashkent, U.S.S.R.)

In Russian. Summary in English.

Methods of collecting samples and characteristics of materials for the studies of the Central Chemical Technological Laboratory NIKhI.

Three varieties of cotton were picked periodically for microchemical and technological analysis. Results of boll weight and lint yield studies are given.

Sakostchikoff, A.P. Über die parzellarische struktur der pflanzenfasern. Melliand Textilberichte 13(10): 517-518. illus. Oct. 1932. (Published at Heidelberg, Germany)

On the divided structure of plant fibers.

"A brief article, following two others published in 1930 in this same journal, relating to the determination of the structural details of fibre. The author outlines two methods of treatment: one with concentrated sulphuric acid, glycerin, or alcohol; the other by means of the chlorzine-iodine staining reaction. Use of the microscope with a drawing apparatus (camera lucida) to record the structural details (cross-wise markings) is outlined together with the treatment of the data. The author measures the percent. of cross markings which completely penetrate the fibre, the percent. found only on one side of the fibre, the percent. perpendicular to the axis of the fibre and the percent. at angles other than 90° to the axis. Work is reported on eight types of cotton together with several other fibres."-Textile Research 3(4): 217. Feb. 1933.

Schultze, Karl. Kapillare erscheinungen an gewebefasern. Melliand Textilberichte 13(10): 544-546. illus. Oct. 1932. (Published at Heidelberg, Germany)

Capillary appearances of fibers.

Cotton and rayon fibers studied.

"A discussion of the relationships of the cross-section shape of the fibre and its properties, particularly as they affect the finished fabric."-Textile Research 3(4): 222. Feb. 1933.

Schwertassek, Karl. Über adsorptionsercheinungen an mercerisierter baumwolle. Melliand Textilberichte 13(10): 536-539. illus. Oct. 1932. (Published at Heidelberg, Germany)

Adsorption characteristics of mercerized cotton.

"The work is concerned largely with the effect of temperature upon the iodine absorption, although mention is made of the effect of chlorine bleach and drying."-Textile Research 3(4): 224. Feb. 1933.

Textile technologist. Modern yarn doubling. I-Essential characteristics of the single yarns. Textile Weekly 10(256): 575-576. Jan. 27, 1933. (Published at 49 Deansgate, Manchester, England)

"In this new series our contributor will survey the technical requirements in both machinery and materials used in modern yarn doubling. The essential characteristics required in the single yarns intended for doubling are discussed in this preliminary survey. and the effects produced in the final thread by variations in these characteristics are indicated."

Watenpaugh, H.N. The ABC of king cotton. Ariz. Agr. Col. Ext. Circ. 75, [12]p. illus. Tucson. 1933.

Illustrations show plant characteristics and magnified lint and yarns of Upland, 'Delta type' and Pima cottons; their most common uses are listed and samples of mercerized cloth made from each are included. Includes also history of Pima cotton.

Webb, R.W. The Suter-Webb cotton fiber duplex sorter and the resulting method of length-variability measurements. Amer. Soc. Testing Materials Proc. 32 (Pt. II): 764-771. illus. 1932. (Published at Philadelphia, Pa.)

Discussion: p. 772-774.

Paper read at 35th annual meeting held at Atlantic City, N.J., June 20-24, 1932.

Yamamoto, Sukenori. The fractionation of nitrocotton. (Preliminary note.) Dissolution of nitrocotton in acetone-water. Cellulose Indus. 9(1, Abs. from the Trans.): 1-3. illus. Jan. 1933. (Published by Cellulose Institute, Department of Applied Chemistry, Faculty of Engineering, Tokyo Imperial University, Tokyo, Japan)

Zakoschchikov, A.P., Korzheniovskii, G.A., and Rytikov, M.G. Mikroskopicheskoe issledovanie khlopkovogo volokna v razlichnoi stepeni zrelosti. Tashkent. Nauchno-Issledovatel'skii Institut po Khlopkovodstvu. All-Union Sci. Research Inst. Cotton Culture and Indus. Proc. 50: 15-43. illus. 1931. (Published at Moskva and Tashkent, U.S.S.R.)

In Russian. Summary in English.

A microscopic investigation of cotton fibers at various stages of maturity.

"Cotton fiber at 40 days of age has the same structure as fiber from mature plants; it responds to mercerizing as mature cotton and has the same swelling coeff. in Schweitzer reagent and in 80% H_2SO_4 . Thus cotton fiber has the same industrial value 35-40 days before the bolls open as after maturity. Only 15-16 days after blooming, cellulose appears in cotton. As the cellulose appears and increases in quantity the proteins decrease. The cuticle differs in compn. from the cellulose of the fiber, but upon hydrolysis with $ZnCl_2$ the products are similar, giving a blue reaction with I. No tannins nor starch were detected in the fibers. A series of illustrations is given."—Chem. Abs. 26(22): 5988. Nov. 20, 1932.

Abstract in Jour. Textile Inst. 24(1): A58. Jan. 1933.

Technology of Manufacture

Adams, W.H. Modern bleaching of cotton fabrics, Mel-
liand Textile Monthly 4(11): 663-665. Feb.1933.
(Published by Textile Manufacturers Monthly, Inc.,
305 Washington St., Brooklyn, N.Y.)

"Alpha." Recent developments in textile machinery.
Indian Textile Jour.43(507): 96. Dec.1932. (Pub-
lished at Military Sq., Fort, Bombay, India)

"Most of the alteration and improvements in
design are merely of detail and little that is
revolutionary has been done."

Boiling out of cotton goods. Removal of extraneous
materials. Singeing before boiling. The desizing agent.
Use of oxidizing agents. Textile Amer.59(2): 9-10,
18, Feb.1933. (Published at 440-442 Old South
Bldg., Boston, Mass.)

From "Houghton's Black and White."

Calcott, W.S. Cotton and the dye chemist. A resume of
some remarkable developments directly or indirectly
concerned with the staple product of the sunny
southland. Dupont Mag.27(1-2): 1-5, 24. illus.
Feb.1933. (Published at Wilmington, Del.)

Adaptation of manuscript of lecture presented to
pupils in a technical high school in Charlotte, N.C.

"The chemist works with cotton in two ways: first,
he treats it for use as a textile fiber and manu-
factures dyes for the purpose; second, he uses it
as a raw material to produce other substances, such
as...lacquer, rayon, and the like."

"Consultant." Current progress in the colouring and
finishing of textiles. Textile Recorder 50(598):
53. Jan.15,1933. (Published at 121 Deansgate, Man-
chester, England)

Davidson, G.F. I. The determination of the hydrogen ion
concentration of hypochlorite solutions with the
glass electrode... (b) The pH variations of hypochlor-
ite solutions during the bleaching of cotton. Brit.
Cotton Indus. Research Assoc., Shirley Inst. Mem.12(1):
22p. illus. Jan.1933. (Published at Didsbury,
Manchester, England)

Eddy, C.L. Peroxide bleaching of cotton piece goods.
South. Textile Bul.43(26): 4. Feb.23,1933. (Pub-
lished at 118 West 4th St., Charlotte, N.C.)

"Paper before American Association of Textile
Chemists and Colorists."

English, Walter. Winding for doubling. Modern machinery for efficient production. Textile Weekly 10(258): 631-632. Feb. 10, 1933. (Published at 49, Deansgate, Manchester, England)

To be continued.

"In a lecture to the British Association of Managers of Textile Works, January 28, 1933."

Golbs, Richard. Das färben von baumwoll-kreuzspulen. Spinner und Weber 51(6): 7-8, 10. illus. Feb. 10, 1933. (Published at Gellertstrasse 7/9, Leipzig, Germany)

The dyeing of cotton cheeses.

Hall, A.J. Bleaching, dyeing and finishing. The year's progress and review of recent discoveries and investigations. Textile Recorder 50(598): 49, 51-52. Jan. 15, 1933. (Published at 121 Deansgate, Manchester, England)

Hudson, W. Artificial humidification. Reasons for its use in cotton manufacture. Textile Weekly 10(257): 608-609. Feb. 3, 1933. (Published at 49 Deansgate, Manchester, England)

"In a lecture to the Preston and District Textile Managers' Association, January 6, 1933."

Discusses effect of humidity on sizing; percentage of humidity required; humidification systems and control.

Hutin, H. Manufacture of suede fabrics. Jour. Textile Inst. 24(1): A48. Jan. 1933. (Published at 16, St. Mary's Parsonage, Manchester, England)

Abstract of article in Fils et Tissus 20: 338-340. 1932.

"Imitation suede is produced by coating fabrics with a rubber solution or a solution with an oxidized linseed oil base, spreading powdered cotton or wool over the coating, and removing the solvent by drying. The cotton powder consists of cut fibres not exceeding 3 mm. in length. Cellulose ester, gelatin, and other types of coatings have been tried but found to be unsatisfactory... The method of dyeing the cut fibres is outlined."

An improved moisture testing oven... in which new arrangements increase the drying speed to six times that of a natural draught oven. Textile Recorder 50(598): 46-47. illus. Jan. 15, 1933. (Published at 121 Deansgate, Manchester, England)

Kauffmann, H. The bleaching of cotton and linen; chain reactions in oxidation processes. Textile Manfr. 59(679): 28-29. Jan. 1933. (Published by Emmott and Co., Ltd., 31, King St., West, Manchester, England)

"The bleaching and oxidising action of hypochlor-

ites is being investigated by the use of mixtures of bleaching liquor with hydrogen peroxide or other substances. The function of intermediate products called activators is described."

Lindenmaier, R. Yarn dyeing and mercerising in Switzerland. Jour.Soc.Dyers and Colourists 48(7): 201-203. July 1932. (Published at Ocean Chambers, 32-34 Piccally, Bradford, Yorkshire, England)

Paper read at meeting held at University College, Nottingham, Jan.27,1932.

"Considerable amounts of cotton yarns and piece goods are treated in Switzerland, being mainly imported in the grey state from England, with smaller quantities from Germany and France."

"Mercerization faults can be largely prevented by exercising care in sinking cotton yarns, in avoiding overloading and in maintaining caustic liquors at a uniform concn. Good circulation and wetting out agents in the mercerizing solns. are conducive to favorable results."-Chem.Abs.26(21): 5761.Nov. 10, 1932.

"Minesta." Tendered cellulose fibres and alkali treatments. An account of some important effects of alkalis on overbleached cotton and rayon materials. Textile Recorder 50(599): 51,53. illus. Feb.15,1933. (Published at 121 Deansgate, Manchester, England)

Mullin, C.E. pH control in bleaching and finishing cotton. Textile Colorist 55(650): 81-84, 132. Feb. 1933. (Published at Woolworth Bldg., 233 Broadway, New York,N.Y.)

Quimet, Arthur. Filling-wind tension for cotton spoolers. Textile World 83(3): 426-427. illus. Feb.28, 1933. (Published at 330 West 42d St., New York,N.Y.)

Question no.645. Quelle est la torsion à donner aux filés coton. Revue Textile 30(8): 765-769. tables. Aug. 1932. (Published at 61, Avenue Jean-Jaurès, Paris, France)

Twist of cotton yarns.

Answer to a reader's question.

"The purposes for which various standard twists are suitable are outlined, and tables are given showing the turns per metre and twist factors used in different parts of France for various counts of yarns spun from American cotton."-Jour.Textile Inst.23(11): A597. Nov.1932.

Raffé, W.G. New Soviet textiles. "Five-Year Plan" designs for cotton prints. (Textile Recorder 50(598): 35-36. illus. Jan.15,1933. (Published at 121 Deansgate, Manchester, England)

Sisley, J.P. Nouvelle méthode de mordantage des fibres végétales, des soies artificielles de viscose et soies cupro-ammoniacales. Permettant leur teinture avec les colorants acides et acides chromatables. *Chimie & Industrie* 27(3-Spec.no.11): 521-524. Mar. 1932. (Published at 49, Rue des Mathurins, Paris, France)

New method of mordanting vegetable fibers and artificial silks.

"The author reviews the methods which have been suggested for imparting affinity for acid dyes to vegetable fibres and describes a method of mordanting which makes possible the dyeing of cotton and of viscose and cuprammonium rayons with acid and chromable acid dyes. A mordanting bath containing the product of the condensation of a primary or secondary amine with an aliphatic aldehyde in the presence of a mineral acid is used. The condensation product of *o*-toluidine with formaldehyde is frequently used. The dyeings obtained with acid dyes are fast to water and acids but in certain cases the fastness to light is not good."-*Jour. Textile Inst.* 23(6): A323. June 1932.

Strong, J.H. Cotton sizing problems. Some common difficulties encountered. *Textile Weekly* 10(253): 505 Jan. 6, 1933. (Published at 49 Deansgate, Manchester, England)

"In a lecture on 'A further talk on sizing' to the Ashton-u-Lyne Mill Managers' Association, December 9, 1932."

T., W. Preparatory processes as they affect the cotton piece dyer. Difficulties and faults met with by the dyer. *Textile Manfr.* 59(679): 31-32. Jan. 1933. Published by Emmott & Co., Ltd., 31 King St., West, Manchester, England)

Viktoroff, P.P., and Goldberg, B. Versuche zur anwendung des potentiometers bei der beurteilung des bäuchprozesses. *Melliand Textilberichte* 12(10): 638-641. illus. Oct. 1931. (Published at Heidelberg, Germany)

Study of kiering processes, using a potentiometer.

"Theoretically, in the kiering of raw cotton, the amounts of NaOH consumed in saponifying natural fats and waxes, in combining with the decomposition products of the pectin impurities, and in decomposing proteins, are in the ratio 41:700:850, and in these reactions only 50% of the usual amount of NaOH present is utilized. Large scale trials with a partly purified cotton showed that only 20% of the NaOH initially present was utilized in removing the impurities, while 60% was absorbed as in mercerizing processes: the remainder appeared to be ineffective.

Textile Research 3(2): 136. Dec.1932.

Abstract also in Chem.Abs.26(20): 5424-5425.
Oct.20,1932.

Technology of Consumption

American society for testing materials. A.S.T.M. tentative standards 1932. 1236p. illus., tables. Philadelphia [c1932]

For cotton and other textile materials see the index.

Everett, C.K. New business opportunities. Cotton Econ. 1(8): 5. Feb.23,1933. (Published at Balter Bldg., New Orleans, La.)

Summary of address by Manager of the New Uses Section of the Cotton-Textile Institute at the annual convention of the New England Awning and Tent Manufacturers Association.

"Cotton awnings offer a wide field for promotional efforts and sales increase."

Sloan, G.A. The cotton industry creates new outlets to supplement old markets. Bradstreet's 61(2848): 188-191. Jan.28,1933. (Published at 148 Lafayette St., New York, N.Y.)

Mentions many new uses for cotton.

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SEED AND SEED PRODUCTS

Cotton seed versus meal. Prog.Farmer 48(2): 8. Feb. 1933. (Published at 821 Nineteenth St., N., Birmingham, Ala.)

"In general terms one ton of cottonseed meal is worth about two tons of cotton seed as a fertilizer."

Gives formulas for homemade fertilizers.

Fuller, F.D., and Sullivan, James. Commercial feeding stuffs, September 1,1931 to August 31, 1932. Tex. Agr.Expt.Sta.Bul.467; 22p. tables. College Station, 1932.

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In address at annual convention of National Live Stock Association, at Ogden, Utah, Jan.12,1933.

Importance to southern farmers of cottonseed oil:

p.8-9.

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Some observations on the transformations of gossypol.

"A description is given of the isolation of gossypol from cottonseed, of its conversion into an acid by means of ozone, and of the preparation of its quinoxaline derivative and dihydrazone."-Jour. Textile Inst.24(1): A72. Jan,1933.

Abstract in Chem.Abs.27(2): 302. Jan.20,1933.

Lonzinger, E.K., and Raskina, R.L. Issledovanie semian i masla khlopchatnika razlichnoi stepeni zrelosti. Tashkent.Nauchno-Issledovatel'skii Institut po Khlopkovodstvu.All-Union Sci. Research Inst. Cotton Culture and Industry Proc.50: 101-112. illus. 1931. (Published at Moskva and Tashkent,U.S.S.R.)

In Russian. English summary.

Study of cotton seed and cottonseed oil of various degrees of ripeness.

Toshchevikova, A.G. 1.K voprosy o vliianii zhmykha na khlopchatnik. 2.Vliianie sery na protsess razlozheniia zhmykha khlopkovykh semian. Tashkent.Nauchno-Issledovatel'skii Institut po Khlopkovodstvu.All-Union Sci. Research Inst. Cotton Culture and Indus. Proc.15/4, 22p. illus. 1930. (Published at Moskva and Tashkent,U.S.S.R.)

1.The problem of the influence of the oil cake fertilizer upon the cotton plant. 2.The decomposition process of the cotton seeds oil cake.

LEGISLATION, REGULATION, AND ADJUDICATION

The Buxton plan. Fibre and Fabric 86(2504): 7-8. Jan. 28,1933. (Published at 465 Main St.,Cambridge,Mass.)

G.E.Buxton suggests bill "wherein the government disposes of its nearly 2,000,000 bales of cotton by giving the cotton farmer one bale of cotton for every five acres not planted in 1933, up to 40 per cent. curtailment."

Edminster, L.R., Schaben, L.J., and Lynsky, M.L. Agricultural price-supporting measures in foreign countries. 294p. tables. Mimeographed. Washington, 1932. U.S.Dept.of agriculture.Bureau of agricultural economics.Foreign agricultural service.F.S.56)

Measures for cotton are included

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Gt.Brit.Board of trade. Merchandise marks act,1926.

Report of the Standing committee respecting measuring tapes made of cotton or linen. 4p. London,H.M. Stationery off.,1933. ([Parliament.Papers by command]Cmd.4240)

Mississippi changes trading laws. New Supreme Court decision declares the 1928 Futures trading act invalid in its application to speculative transactions. Cotton Econ.1(8): 9,10. Feb.23,1933. (Published at Balter Bldg., New Orleans,La.)

Quotes from the opinion written by Associate Justice Vergil Griffith.

Shall the ginner be forced to staple all cotton.Law provides fine if ginner fails to report in 24 hours. Cotton Ginners' Jour.4(5): 7, 15. Feb.1933. (Published at 109 North Race St., Dallas, Tex.)

Reprints, in full,Texas Senate Bill No.36.

Sloan,G.A. Manufacturers margins.Discussions of the effect which the Domestic allotment plan would have in regard to price levels for cotton goods...The Cotton textile institute recently published some cost figures--and its President explains these price calculations further. Cotton Econ.1(7): 9-10. Feb.16,1933. (Published at Balter Bldg.,New Orleans, La.)

The Smith cotton plan. South.Textile Bul.43(26): 12, 18. Feb.23,1933. (Published at 118 West 4th St., Charlotte, N.C.)

Includes the main provisions of the plan, which "would use the government's huge holdings of cotton--estimated at 3,500,000 bales--to obtain a reduction of that amount in the 1933 crop...by offering the producer who agrees to cut his production from 30 to 50 per cent below last year an option on an amount of the government cotton equal to the quantity by which he reduces his output."

Textiles and tariffs in South Africa. Textile Recorder 50(598): 63. Jan.15,1933. (Published at 121 Deansgate, Manchester, England)

Efforts are being made to establish a "small import duty" on cotton yarn as a step in establishing cotton spinning industry in the Union of South Africa.

MISCELLANEOUS--GENERAL

British cotton industry research association. Report of the thirteenth annual general meeting. 16p. [Manchester,1932]

"Held at the Shirley Institute, Didsbury, Manchester on Wednesday, 19th October, 1932."

Includes abstract of report by Dr.R.H.Pickard,
Director of Research.

Sociedad nacional agraria (Lima, Peru) Memoria que la
Junto Directiva...1931-1932. 204p. illus. 1932.

Cotton statistics 1931: p.45-53. Chart showing
quotations and premiums: p.55, 59. Map of Peruvian
cotton crop 1931, by Montero Bernalles: p.57.

Report of Sr.José Antonio de Lavalle, delegate of
National Agrarian Society to the Fourth Pan-American
Commercial Conference: p.79-97. Includes report on
the cotton situation.

Insects: p.165-173. Includes report presented by
the chief of the section of entomology, Dr.Johannes
Wille, regarding his visit of inspection to the
valley of Chinca, Jan.10-15, 1932.

State cotton council of Oklahoma stresses industry
cooperation. Cotton Econ.1(5): 1,3. Feb.2,1933.
(Published at Balter Bldg., New Orleans,La.)

Annual meeting, 1933, of Oklahoma Cotton Council.

Tippett, L.H.C. The methods of statistics.An intro-
duction mainly for workers in the biological scien-
ces. 222p. illus. London, Williams and Norgate ltd.,
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The author, who is statistician to the British
Cotton Industry Research Association, states in the
Preface: "In the present book I have attempted to
present a single system of statistics, so that a
reader with little previous acquaintance may obtain
a good working knowledge and understanding of the
methods available. The first chapters deal with fre-
quency distributions and constants, and with the
theory of errors, in orthodox manner, but in the
later chapters the underlying theme is Fisher's
idea of the Analysis of Variance; correlation is
introduced as a special case of this."

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1932, by F.Yates; in Jour.Heredity 23(12): 513-514.
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Willis,H.H. Place of technical men in the textile in-
dustry.South.Textile Bul.43(23): 6,12-13. Feb.2,1933.
(Published at 118 West 4th St., Charlotte, N. C.)

"Paper before Quarterly Meeting of the American
Association of Textile Chemists and Colorists,
Piedmont Section, at Greenville, S.C., January 28,
1933."

Value of technically trained men in solving mill
problems, such as those of regain, and grade and
variety in relation to dyeing.